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Bridging Business and Education for the 21st Century Workforce

A STRATEGIC PLAN FOR VIRGINIA'S CAREER PATHWAYS SYSTEM



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SUBMITTED BY:
THE GOVERNOR'S TASK FORCE ON CAREER
PATHWAYS SYSTEM DEVELOPMENT

PREPARED BY:
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Executive Summary

With growing pressure from international competition and the rapid pace of technological change, the “war for talent” has been described as the central battleground for businesses in the 21st century economy. As a result, the competitive position of states and regions in the global marketplace is largely dependent on their workforces. States and regions are the keepers of the educational institutions that develop workforce talent.

This talent in turn attracts new businesses and supports the growth of existing businesses and emerging industries. By bolstering the public education and training systems that prepare talented workers, state and regional policymakers can provide the lifeblood for thriving economies.

The call for a career pathways system is one of several actions the Commonwealth has taken to respond to market needs. In 2006, the Governor released strategic plans for both Virginia’s economic and workforce development systems. Earlier this year, he formalized the cross-agency Workforce Sub Cabinet to coordinate all workforce development efforts across the state. These include the Workforce Investment Act (WIA) and the Workforce Investment Systems (Title I) programs, which were transferred to the Virginia Community College System in July. Add to this the planned revision of the state’s Standards of Learning, and it is clear that Virginia has made significant strides in creating the foundation for a world-class workforce development

system. But there is still more to be done.

The Governor’s Task Force for Career Pathways System Development was created to develop a strategic plan for implementing the state’s career pathways system. With assistance from Workforce Strategy Center, a nationally recognized authority on career pathways, the Task Force assessed Virginia’s current workforce development and education systems.

Having researched and examined data and consulted with national experts and state and local leaders in the Commonwealth, the Task Force has concluded the following:

- Education and training systems need to be better aligned.
- Connections to the business community and the labor market need to be strengthened.
- Support services at all levels of education, particularly in community colleges and adult education, need to be bolstered.
- Enrollment in and access to post-secondary education need to be increased.

- Education and training need to become more rigorous to meet the skill demands for 21st century careers.

Based on these findings, the Task Force makes the following recommendations to guide the implementation of a career pathways system in Virginia:

1.

ESTABLISH STATE LEADERSHIP AND AN OPERATIONAL FRAMEWORK TO SUPPORT REGIONAL ACTION.

Action: Charge the Virginia Workforce Council (Council) with responsibility for leading the state’s career pathways system initiative.

Action: Set clear implementation guidelines by creating an operational plan for the state and regional career pathways system.

Action: Identify opportunities for resource alignment to support the career pathways system at the state level.

2.

ESTABLISH A MEANS TO ENCOURAGE AND FACILITATE THE USE OF DATA TO STRENGTHEN CONNECTIONS TO BUSINESS, INFORM PROGRAM DEVELOPMENT AND MEASURE SUCCESS.

Action: Create a labor market information advisory group to keep the Council, Career Pathways System Sub Council (Sub Council) and state agencies apprised of current labor market data trends, research and analysis and how these might affect and be used to inform both policy and practice.

Action: Explore options for tracking career pathways system progress and success.

3.

ESTABLISH THE MEANS TO ENCOURAGE TRANSITIONS AMONG EDUCATION AND EMPLOYMENT SYSTEMS, PROGRAMS AND SERVICES. TRANSITIONS SHOULD

ALLOW FOR FLEXIBILITY AT THE REGIONAL AND/OR INSTITUTIONAL LEVEL.

Action: Set a policy goal for improving student transitions at all levels and develop indicators of success for meeting this goal.

Action: Create guidelines for strengthening transitions for adult learners.

Action: Establish guidelines to enable the one-stop system to serve as an integral component of the career pathways system.

Action: Strengthen the roles that registered apprenticeship and lifelong learning can play in advancing transitions.

4.

ESTABLISH THE MEANS FOR EXPANDING THE PROVISION OF SUPPORTIVE SERVICES, INCLUDING ADVISING AND COACHING, TO INCREASE RETENTION AND COMPLETION RATES AMONG VIRGINIANS ENROLLED IN WORKFORCE TRAINING AND EDUCATION PROGRAMS.

Action: Set a policy goal for improving access to coaching and advising services to help improve program retention and completion rates. Establish indicators of success for meeting the goal.

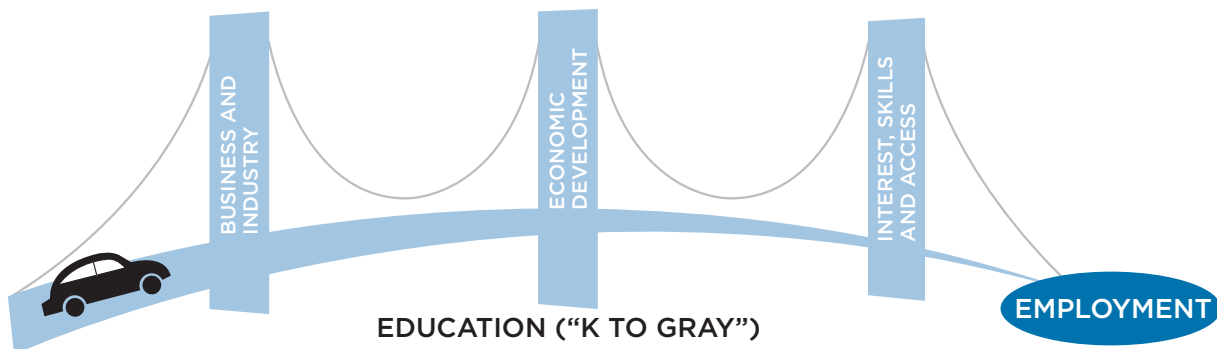
5.

ESTABLISH SUSTAINABILITY OF VIRGINIA'S CAREER PATHWAYS SYSTEM AS A CROSS-AGENCY AND BUSINESS PRIORITY ACROSS ALL RELEVANT AGENCIES AND KEY INDUSTRIES.

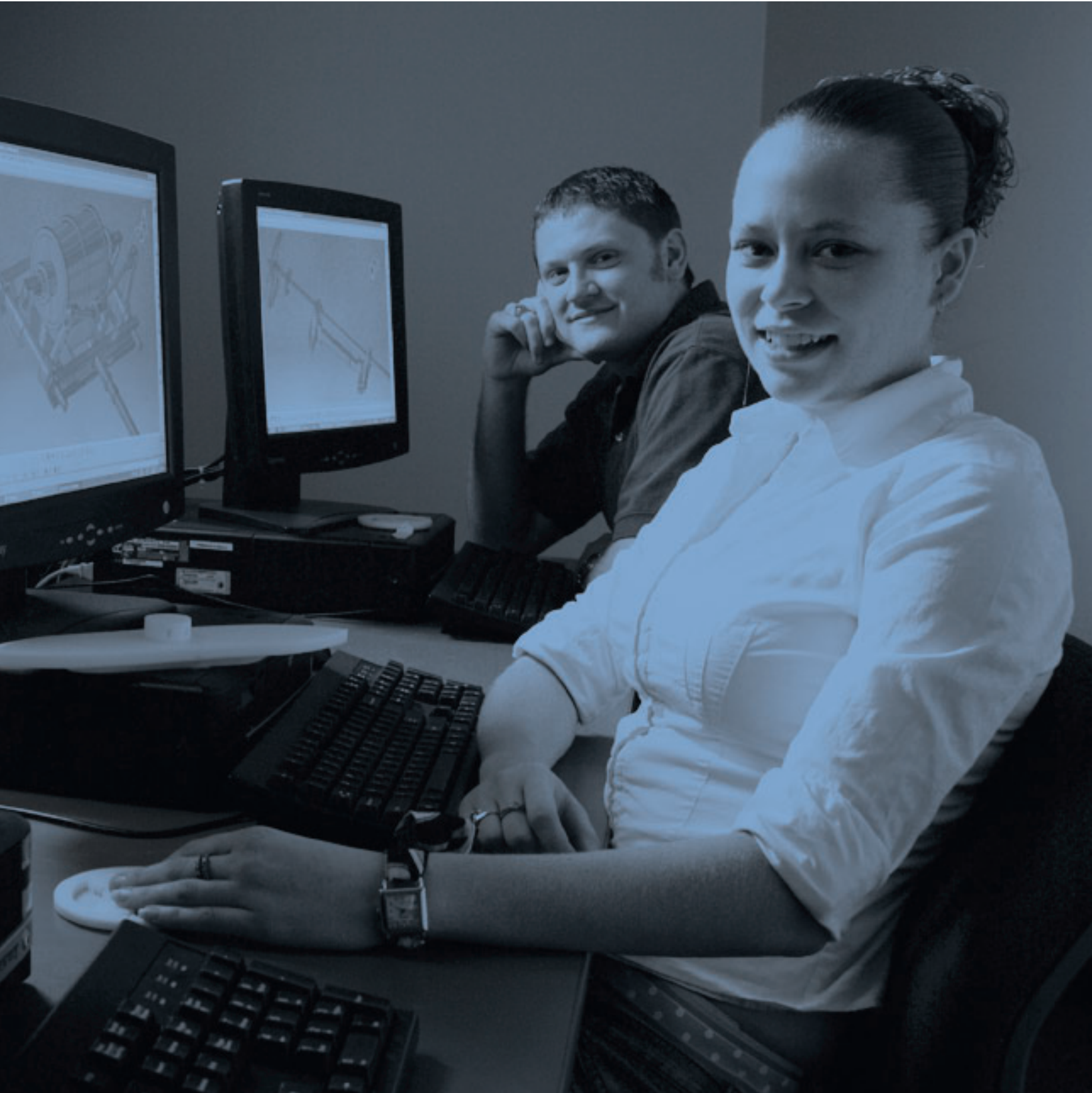
Action: Task the Sub Council with the responsibility to explore how each of the member agencies and businesses can support and sustain the career pathways system into the future.

Action: The Council should build on the Sub Council findings and within one year of adopting the career pathways system responsibility develop a sustainability plan that identifies roles for each of the Sub Council agencies.

CAREER PATHWAYS SYSTEM—THE BRIDGE TO ECONOMIC AND INDIVIDUAL SUCCESS



Introduction



Against the backdrop of an uncertain national economy, the Commonwealth of Virginia appears to stand on solid ground. With a labor market growing faster than the national average, and a higher per capita income, the state has ranked No.1 for three consecutive years in the Forbes.com study “Top States for Business.” But the competition is getting stronger both at home and abroad. *Bridging Business and Education for the 21st Century Workforce: A Strategic Plan for Virginia’s Career Pathways System* provides a blueprint to help ensure that Virginia maintains its competitive edge in the global economy.

In the past two years, Virginia has taken bold steps to strengthen its economic and workforce systems. In September 2006, the Governor released *Virginia Leading the Way: Governor Kaine’s Economic Development Strategic Plan*, which called for the development of a world-class workforce system that is both responsive to employer and worker needs and focused on regional markets. Less than a year later, *Governor Kaine’s Workforce Development Strategic Plan* called for a consolidated and performance-based workforce system that responds to “long-range talent and skill forecasts as well as emergent near-term market and business needs.” Among its strategies, the Commonwealth elected to create a statewide career pathways system as a means for linking its education, workforce and economic development systems at all education and training levels.

A “career pathways system” is an ap-

proach by which regions align publicly supported services and programs to build a workforce customized to the needs of local labor markets. By aligning policies and programs and functioning as the platform for integration and coordination, the system facilitates regional efforts to identify and respond to market demand. A career pathways system is the foundation that supports the implementation of career pathways regionally and the functioning of these arrangements across a state. A “career pathway” is the framework that aligns the particular education and training programs necessary to enable individuals to secure employment within a specific industry or occupational sector and to advance over time to successively higher levels of education and employment in that sector, thus supplying qualified workers for local employers.

While California, Kentucky, Ohio, Oregon, Washington and Wisconsin are rec-

ognized for implementing a number of career pathways strategies, Virginia is the first state in the nation in which the Governor, multiple state agencies and policy leaders have elected to implement and manage a comprehensive career pathways system. The system is intended to facilitate the alignment of policies and resources at all levels of government to promote economic growth across the Commonwealth. A systemic approach to the alignment process will expand and connect education and workforce development initiatives to use all available resources and programs to their greatest effect and eradicate duplication of effort.

This strategic plan details the Commonwealth’s blueprint for developing, implementing and sustaining its statewide career pathways system. The plan is funded by a Workforce Investment Act incentive grant awarded to Virginia in July 2007. To oversee the development of the strategic plan, the Commonwealth

assembled the Governor's Task Force on Career Pathways System Development (Task Force) composed of representatives from the Virginia Community College System (VCCS), Virginia Department of Education (VDOE: both Career and Technical Education and Adult Education), the Secretary of Education's Office, the State Council for Higher Education in Virginia (SCHEV), the Department of Labor and Industry (DOLI), the Office of the Senior Advisor to the Governor for Workforce and the Virginia Economic Development Partnership (VEDP).

The plan also reflects input from a diverse group of state, regional and local stakeholders, as well as lessons learned from other states that have implemented career pathways. The Task Force selected Workforce Strategy Center (WSC), a leading national organization specializing in issues related to career pathways, workforce development and education, to assist with the plan's development and outreach.

METHODOLOGY

The creation of Virginia's career pathways system strategic plan involved extensive research and the efforts of multiple education, workforce and economic development agencies working with a carefully selected group of key businesses, policymakers and practitioners. The Task Force conferred with WSC monthly, during which time it identified research participants, approved research protocols and reached consensus on the ultimate direction of the plan.

To benefit from the best thinking in the Commonwealth in its assessment of

the current state of workforce development in Virginia—and the challenges and promising practices therein—WSC over the course of five months conducted a literature review, facilitated a asynchronous online discussion, or Jam, with 80 participants and interviewed more than 20 state and local representatives across the Commonwealth. Jam participants and interviewees represented each of the key organizations and governmental agencies in the Commonwealth as well as an appropriate balance of regional practitioners, such as college presidents and chamber of commerce and workforce investment professionals.

The team gathered information on Virginia's economy and its educational infrastructure and policy framework for workforce development with regard to creating a statewide career pathways system strategic plan in order to identify the following:

- Promising practices in developing statewide systems.
- Policies that enable alignment of systems.
- Key challenges.
- Collaborative approaches and solutions.
- Local expertise.
- Successful outreach strategies.

The Governor launched the development of the career pathways system strategic plan at a meeting with 40 of the Commonwealth's education, workforce development and economic development agency heads and business and industry representatives. The meeting served as an opportunity for cross-agency discussion at the highest level

around the need to prioritize the creation of a world-class workforce for Virginia.

This report begins with a brief review of the state of the Commonwealth's economy and the progress made to date on the Governor's 2006 plan to build a world-class workforce development system. The report follows with an assessment of current career pathways system activities in the Commonwealth based on information gathered from research and the public and private sector representatives queried for this report. The career pathways system definition and goals adopted by the Task Force are next. The report concludes with the Task Force's recommendations for establishing a statewide career pathways system and an action plan to meet its stated goals.

Virginia's Competitive Position

In the 21st century economy, the “war for talent” has been described as the central battleground for businesses.¹ In the context of growing pressure from international competition and the rapid pace of technological change, perhaps the most important resource for businesses is the workforce. As a result, the competitive position of states and regions in the global marketplace is largely dependant on regional talent.²

States and regions are the keepers of the educational institutions that develop workforce talent. This talent in turn attracts new businesses and supports the growth of existing businesses and emerging industries. By bolstering the public education and training systems, state and regional policymakers can provide the lifeblood for thriving economies.

Virginia as a whole is well-positioned to succeed in the increasingly talent-driven global economy, but not all regions and people within the state are prepared to share in the success. On average, the state has a highly educated workforce and a growing segment of knowledge-economy industries, or industries highly reliant on the skills and talents of their workforces. However, the distribution of the educated populace and thriving economic sectors is geographically uneven. Several regions and populations experience higher than average unemployment and poverty rates.

Overall, the state performs well on key workforce metrics. On average, state residents age 25 and older are highly educated, ranking ninth in the nation in associate-degree attainment, seventh in the

nation in bachelor's-degree attainment and fifth in the nation in advanced-degree attainment.³ Employment growth in the state has roughly coincided with or been slightly above the national trend over the past seven years.⁴ Moreover, as shown in Table 1, many knowledge-economy industries are growing more quickly in the state than in the rest of the country. AeA (formerly the American Electronics Association), the nation's largest technology trade association, ranks Virginia first in technology-industry concentration.⁵ The state unemployment rate (4.4 percent in July 2008) is well below the national rate (5.7 percent), is in line with Maryland (4.4 percent) and Delaware (4.4 percent) and is lower than the rates in West Virginia (4.5 percent), Pennsylvania (5.4 percent), Kentucky (6.7 percent), Tennessee

(6.9 percent) and South Carolina (7.0 percent).⁶

Additionally, the business climate in Virginia is viewed favorably by the business community. In ranking Virginia first among all U.S. states, Forbes.com analyzed business costs, economic climate, growth prospects, labor, quality of life and regulatory environment.⁷

Not all of the positive attributes of Virginia's economy and workforce are shared evenly throughout the state. The Northern Virginia and Central Virginia regions, for example, have workers with higher average educational attainment, higher incomes and higher knowledge-industry concentrations and employment opportunities than do other regions of the state.⁸ Nearly 65 percent of jobs in the professional, scientific and technical services industry are located in Northern

TABLE 1: FAST-GROWING KNOWLEDGE-ECONOMY INDUSTRIES IN VIRGINIA

Industry	Virginia		United States
	Current Employment	Projected Growth 2006–2016	Projected Growth 2006–2016
Professional, Scientific and Technical Services	346,688	42.2 percent	28.8 percent
Finance and Insurance	134,152	18.9 percent	13.2 percent
Information	91,797	9.0 percent	6.9 percent
Management of Companies	75,038	22.6 percent	14.9 percent

Source: Virginia Workforce Connection, www.vawc.virginia.gov.

A World-Class Workforce Development System

Virginia, with an additional 20 percent in the Richmond area and Hampton Roads region.⁹

Conversely, several regions of the state including the Eastern, Southside, Southwest and West Central regions lag behind the state averages in unemployment, poverty and educational attainment, which may hinder efforts to attract knowledge-based industries.¹⁰ Despite the high comparative ranking of Virginia's workforce, the state ranks 28th in high school completion.¹¹ Furthermore, according to the Council on Virginia's Future, the Eastern, Southside, Southwest, Valley and West Central regions have high school completion rates below the national average. In these regions, more than 25 percent of individuals 25 years and older do not have high school diplomas.¹²

¹ Ed Michaels, Helen Handfield-Jones, Beth Axelrod. *The War for Talent*. (Cambridge, MA: Harvard Business Press, 2001).

² Richard Florida. *The Flight of the Creative Class: The New Global Competition for Talent*. (New York, NY: Harper Collins, 2005).

³ U.S. Census Bureau, 2007 American Community Survey.

⁴ Council on Virginia's Future, <http://vaperforms.virginia.gov>, accessed August 20, 2008.

⁵ AeA, "Virginia Now Has the Highest Concentration of Technology Workers in the Nation," http://www.aeanet.org/pressroom/prj_cs2007_virginia.asp, accessed August 20, 2008.

⁶ Bureau of Labor Statistics, Unemployment Rates, July 2008.

⁷ Kurt Badenhausen, "The Best States for Business," *Forbes Magazine*, July 31, 2008.

⁸ Council on Virginia's Future, <http://vaperforms.virginia.gov>, accessed August 20, 2008.

⁹ U.S. Census Bureau, 2002 Economic Census.

¹⁰ *Ibid.*

¹¹ U.S. Census Bureau, 2007 American Community Survey.

¹² Council on Virginia's Future, <http://vaperforms.virginia.gov>, accessed August 20, 2008.



Since he became Virginia's 70th Governor in 2006, Tim Kaine has made the development of the state's workforce a priority. The passage of SB 494/HB 1377 in the 2006 General Assembly and the Governor's issuance of Executive Order Twenty-five (2006) established the Governor as the Chief Workforce Development Officer, responsible for coordinating workforce development efforts in an efficient manner.

In 2006, *Virginia Leading the Way: Governor Kaine's Economic Development Strategic Plan* called for developing a "world-class workforce development system that meets the needs of workers and employers throughout the state.

Later that year, Virginia's Workforce Development Strategic Plan included as a strategy the creation of a statewide career pathways system to link its education, workforce and economic development systems at all education and training levels.

In 2007, the Commonwealth was awarded a Workforce Investment Act incentive grant and elected to use a portion of the funds for the development of Virginia's career pathways system strategic plan. In January 2008, the Governor issued Executive Order Sixty-One, formally establishing the Workforce Sub Cabinet (Sub Cabinet) under the chairmanship of the Chief Workforce Development Officer. The Sub Cabinet coordinates the state's workforce development efforts through membership, including the Officer; the Secretaries of Administration, Com-

merce and Trade, Education, Finance, Health and Human Resources and Public Safety; the Deputy Chief of Staff; the Director of Policy; a staff member from the Governor's Policy Office assigned to the workforce; the Deputy Workforce Advisor; the Superintendent of Public Instruction; the Virginia Community College System Chancellor; and the Executive Director of the State Council of Higher Education.

On July 1, 2008, WIA workforce investment programs were placed under the responsibility of the Virginia Community College System. The VCCS staffs the Virginia Workforce Council, which provides policy direction to the local workforce investment boards under WIA. The move is designed to streamline programs and services to better reflect the skills and training needs of business, industry and job seekers. The new workforce delivery system will have a greater focus on training, skill development and developing workers into lifelong learners so they are prepared for knowledge-based careers.

Additional efforts are being under-

taken to make education and workforce systems more demand-driven. Many of the local school divisions have community college and Workforce Investment Board representatives on their career and technical advisory councils to recommend courses that respond to needs in the regional economic marketplace. The VDOE is also working with the VCCS at the state level to create sample high-quality career pathways that require local high school divisions and community colleges to work together to meet the labor market requirements in their areas. To ensure efficiency, effectiveness and reduction in the duplication of efforts throughout the state, Virginia's career pathways system will coordinate and facilitate these efforts. As one education leader put it: "If we all begin to think systemically about outcomes—the skills and abilities business and industry are looking for—with a view to the larger continuum of opportunity, we will find ways to match our institutional strengths with the needs of individuals and employers."

FRAMING THE SYSTEM

An effective career pathways system serves to improve the capacity of and strengthen cooperation among organizations involved in education, workforce preparation and social services to meet the needs of local residents and employers. But it must also serve to keep a region's workforce skills up-to-date. To ensure strong pipelines to targeted sectors, a career pathways system has to not only adapt existing education and training programs and services but add new ones as well.

With Workforce Strategy Center, the Task Force has identified the major state-administered workforce development programs that form the building blocks of a career pathways system. These programs serve a diverse set of populations, including students at all educational levels, workers, the unemployed and many targeted populations, such as low-income individuals, people with disabilities and limited-English speakers. The programs range in size from serving dozens to thousands, and they range in budget from tens of thousands to tens of millions of dollars. They serve overlapping populations, often operate in isolation from one another and draw on a complex array of federal and state categorical funding sources, each with its own performance requirements.

Table 2 lists the state-administered workforce development programs identified by the Virginia Workforce Council in 2005, as well as others identified more recently by the Task Force. The populations currently served are also noted.

Leaders throughout the Common-

TABLE 2: VIRGINIA STATE-ADMINISTERED WORKFORCE DEVELOPMENT PROGRAMS AND POPULATIONS SERVED

PROGRAM NAME	K-12 STUDENTS	POSTSECONDARY STUDENTS	UNEMPLOYED YOUTH	UNDEREMPLOYED YOUTH	UNEMPLOYED ADULTS	UNDEREMPLOYED ADULTS	REGISTERED APPRENTICES	DISLOCATED WORKERS	INCUMBENT WORKERS	BUSINESSES
Academic and Career Plans	X									
Adult Education			X	X	X	X		X	X	X
Career and Technical Education (CTE)	X	X					X			
Career Clusters	X	X								
Career Coaches	X	X	X	X			X			
Career Readiness Certificate	X	X	X	X	X	X	X	X		
College Access Challenge Grant Program	X									
Commonwealth Scholars	X									
CTE Academies	X									
Dual Enrollment	X						X			
English Language Programs	X	X	X	X	X	X			X	X
Food Stamp Program					X	X		X		
Gear Up/Access Virginia	X									
Governor's Career and Technical Academies	X	X								
Governor's Opportunity Fund									X	X
Governor's Schools	X									
Jobs for Virginia's Graduates										
Jobs Investment Program									X	X
Manufacturing Extension Partnership		X			X	X	X	X	X	X
Middle College			X	X	X	X				
Need-Based Financial Aid		X								
One-Stop Career Centers			X	X	X	X	X		X	X
Registered Apprenticeship		X				X	X	X	X	X
Senior Employment Program					X	X				
Tech Prep	X	X	X	X		X				
Trade Adjustment Assistance (TAA) Program					X	X		X	X	
Two-Year College Transfer Grant Program		X								
Two-Year/Four-Year Transfer Policies		X								
VCCS Customized Training									X	X
Vocational Rehabilitation	X	X	X	X	X	X				
WIA Adult Programs					X	X	X		X	X
WIA Dislocated Worker Program					X	X	X	X	X	X
WIA Youth Programs	X	X	X	X						X
Worker Retraining Tax Credit							X		X	X

wealth recognize the importance of weaving these programs and others into a network that helps students and workers attain skills and progress to higher levels of education and work. They

voiced the need for a well-aligned system that allows all Virginians to access and advance along flexible and seamless educational and career routes without unnecessary barriers.

Challenges to Address



In working to align the existing programs, the Task Force identified systemic challenges that must be addressed in establishing a career pathways system. These challenges, described below, have resulted from extensive research and interviews with key local and state leaders in the public and private sectors.

EDUCATION AND TRAINING SYSTEMS NEED TO BE BETTER ALIGNED.

In the 2008 *Education Week Quality Counts* report card, Virginia received an overall grade of B-. It received a C+ for transitions and alignment. Among the factors that contributed to the C+ score were: the state lacks a state definition for school readiness or college readiness; a student enrolled in college-preparatory courses is not required to earn a high school diploma; credits for high school are not aligned with the postsecondary system; high school assessment is not aligned with the postsecondary system; and high school assessment is not used for postsecondary decisions.¹³

More recently, the National Commission on Adult Literacy's study on federal adult education systems reported that as of December 31, 2006, only 13,173 persons in Virginia attained GED certificates out of a population of 587,097 adults from ages 18 to 64 without a high school diploma.¹⁴ Stating that existing programs worked in isolation and were falling short of the needs of adult learners, the Commission called for connecting federal adult education and workforce skills programs more effectively to state and local postsecondary education and job-training programs.

Aligning related policies and programs is one of the primary features of a career pathways system. Individuals looking to advance in their educational and career goals must be able to move seamlessly across different levels of education and workforce training programs. This is especially critical for adults and hard-to-serve populations making transitions from one education or workforce training program to another. This includes so-called "non-traditional" students at higher educational institutions who earn the label either because they are older than the typical undergraduate or because they are accessing special, unconventionally scheduled classes created to accommodate a less traditional student.

Although personal barriers such as finances or lack of preparation can help explain failure at these transitions, it is more often the result of having to maneuver through a number of complex and uncoordinated service-delivery systems. Without the benefit of smooth transitions, students are often faced with having to duplicate their efforts, causing some to give up.

Among the strategies states are using to improve transitions are:

- Setting goals and improving data on student transitions.

- Aligning entry and exit criteria across educational levels.
- Promoting institutional practices that improve transitions.¹⁵

The Governor's economic development and workforce development strategic plans are both strong moves on the part of the Commonwealth to strengthen, coordinate and align its various workforce and education policies, systems, programs and services to promote economic growth. The creation of a statewide career pathways system is a direct outgrowth of these plans. As noted earlier, Virginia has made substantial headway in coordinating its workforce programs. In its 2002 study, *Review of Workforce and Training in Virginia*, the Joint Legislative Audit and Review Commission (JLARC) recommended that one agency undertake the consolidation of workforce training programs and the administration of WIA. As of July, the WIA workforce investment programs and oversight of the one-stop delivery system that the WIA creates are now the responsibility of the VCCS.¹⁶ Virginia's one-stop system offers tremendous potential for the integration of services and resources.

In addition, Virginia's secondary Career and Technical Education programs have state-mandated curriculum corre-

lated to Virginia's Standards of Learning (SOL), which outline the Commonwealth's expectations for student learning and achievement in grades K–12 to facilitate transitions between levels of education. Virginia's General Educational Development and English as a Second Language programs recently developed content standards, which experts agree are needed for students to move to the next level of education or training.¹⁷ Research participants suggest expanding this effort to incorporate career pathways into the SOL.

And yet, as evidenced by Kentucky, South Carolina and Wisconsin, more can be done. In 2000, Kentucky passed legislation that committed the state to improving transitions of adult learners into postsecondary education. The law mandates assessment and placement of students and formalizes a pathway for students from adult to developmental education to credit classes. Through demonstration pilots, outreach, awareness and multiple partnerships, Kentucky Adult Education (KYAE) has improved the rate of GED graduates who enroll in postsecondary education within two years from 12 percent in 1998 to 19 percent in 2004.¹⁸

In 2002, South Carolina developed a Memorandum of Agreement (MOA) between its adult education and technical college systems. The MOA includes goals to improve transitions of adult education students to postsecondary education, reduce the placement of these students in remedial education and develop a "more seamless adult education delivery system."

The Wisconsin Technical College (WTC) and the University of Wisconsin

(UW) systems have also implemented a number of strategies to improve credit transfers to ensure that students can move between the two systems with greater ease. Among other improvements, the agreement provides a list of technical college core courses that will transfer to all UW institutions. These courses will have common titles, course numbers and competencies at all WTC institutions.¹⁹

CONNECTIONS TO THE BUSINESS COMMUNITY AND THE LABOR MARKET NEED TO BE STRENGTHENED.

According to the business community, the workforce development system has great potential to strengthen its demand-driven orientation. Business believes education and training systems have been making inroads to becoming more responsive to its needs but still have to surmount the barriers created by government bureaucracies and legislated mandates.

Interviewees and Jam participants pointed to Virginia's Job Investment Program (VJIP) and Tech Prep as good models for reaching out to the business community. VJIP provides an incentive directly to employers moving to Virginia or greatly expanding their business in Virginia, and Tech Prep has made a concerted effort to become more responsive to business and industry. Virginia's University-Based Economic Development (UBED) group is also highly regarded. It provides a point of contact for every public institution so businesses have easy access to public college and university resources.

Access to and communications with

the business community are perceived as challenges. Business and industry panels do assist in the development of secondary-level Career and Technical Education curriculum and are involved in cooperative education and work-based learning programs at the secondary level. Still, education and workforce leaders believe the business community could play a larger role in helping prepare students and workers for employment.

To be more effective, employers recommended that education agencies coordinate their efforts to engage business rather than approach businesses individually. They also believe business involvement in education would be facilitated if the education community were to better understand both the role of labor market information (LMI) in a demand-driven market and how a business functions. Of special note, the business community cited the lack of communications and marketing on the part of the education agencies as a major reason that businesses are not more involved in workforce development.

In regard to becoming more demand-driven, interviewees noted that while there are many sources and pockets of information throughout the state for LMI data, there is no coordinated effort to use the same data sources or to think about industries in the same way. The use of LMI among education and training providers to determine occupational demand is often sporadic, and many programs and systems are not accustomed to examining labor market demand when developing new programs.

In addition, interviewees and Jam participants reported that data sharing is dif-

difficult because each agency has its own data collection system. Economic and workforce development data are collected by a number of agencies and organizations, which makes it hard for regional organizations and employers to navigate. Current data sources include: the VEDP, Virginia Department of Business Assistance, the Virginia Employment Commission, Weldon Cooper Center and Chmura Economics and Analytics. Some regions also have created their own data collection systems. For example, the Shenandoah Valley Partnership has created a regional data center that includes information on housing, cost of living, education and training. To ensure that programs and services are relevant, the business community believes it is important to improve awareness of labor market needs.

In its analysis of Virginia's workforce, The Urban Institute recommended that Virginia "improve the link between training initiatives and specific occupations and industries by better using labor market data on projected need for labor."²⁰ An analysis conducted for the Governor's Strategic Plan for Workforce Development concluded that some workforce training programs do not reflect demands in the market.²¹ Reiterating the need for improved communications, the plan recommends educating employers about and promoting awareness of the benefits of investing in Virginia's workforce development system.

States have implemented a variety of measures to strengthen connections to business. The Illinois Critical Skills Shortage Initiative (CSSI) uses state WIA monies to fund regional partnerships of

employers, economic and workforce development agencies and postsecondary providers to identify occupations with critical shortages of skilled workers in order to consolidate services that address these shortages. CSSI findings about shortages are being used to guide investments in workforce education. Industry Skill Panels in Washington State convene business, labor, education and workforce professionals to assess current and future skill needs and how best to help workers advance and businesses prosper.²²

While states such as Texas and Maryland have impressive data systems, Florida stands out where data sharing and tracking from education to employment are concerned. The state's data system has the ability to examine student outcomes across institutional systems and into the workforce. It has data on all students in public K–12, college, university and career and technical students, as well as those in private colleges and vocational trade schools, casting a considerably wider net than any other state system. The database captures outcomes for students who transition from one educational system to another, as well as for participants of specific workforce development programs such as WIA, Wagner-Peyser, Temporary Assistance for Needy Families (TANF) and Prison Industries. Outcomes can be generated for specific categories of students, such as community college completers and leavers by type of program study. Significantly, the system measures the number of students and program participants continuing their education into other systems and tracks employment and earnings outcomes by connecting to the state's wage record files.

SUPPORT SERVICES AT ALL LEVELS OF EDUCATION, PARTICULARLY IN COMMUNITY COLLEGES AND ADULT EDUCATION PROGRAMS, NEED TO BE INCREASED.

With more than 500,000 working-age adults in Virginia without a high school diploma—and adult education programs holding steady over the past six years serving approximately 30,000 individuals a year—education leaders believe the Commonwealth needs to enhance its intervention efforts. Citing SCHEV Education Pipeline Data in its recent report, the Virginia Adult Learning Panel notes that high school dropouts alone will add another quarter million adults to the dropout total in Virginia every 10 years. "It is this 'leaking bucket' of students lost in the education pipeline (approximately 25,000 each year) who are then difficult to recapture through adult education programs."²³

Across the country, states are looking for ways to raise the percentage of enrolled students who successfully complete their studies by obtaining a certificate or degree. Many studies have indicated that America's higher education institutions, particularly community colleges, have significant room to improve retention and completion rates.²⁴ Researchers have found that approximately one-half of community college students fail to return after the first year and eventually fail to obtain a certificate or degree. According to VCCS, these numbers hold true for Virginia as well.²⁵

Experts generally classify support services into three groups. In order of priority they are resources that: 1) help students successfully navigate academic challenges, such as educational plans

customized to individual career interests and alternative instructional models; 2) provide personal guidance services, such as tutoring; and 3) help alleviate other family and personal needs, such as child care and transportation.²⁶

Workforce and education leaders in Virginia agree that the provision of counseling and career coaching is critical to helping students prepare for careers at all levels of education. Currently the state's Career and Technical Education program is using career pathways to develop plans of study for each high school student. The VDOE is also in the process of developing guidelines for the implementation of Academic and Career Plans, beginning at the seventh-grade level, to help guide course selection and preparation for postsecondary education and careers. These Academic and Career Plans will be used by all secondary students and will be merged with the current Career and Technical Education career pathways plans of study using templates customized for each high school student.

However, both business and education are most concerned about support services beyond the K–12 system. They expressed concern that the GED credential no longer meets the demand for even low-skilled employment and that students need to be encouraged to think about advancing to higher education and careers.

Although efforts are currently under way to expand Virginia's Middle College and Career Readiness Certificate (CRC) programs, both community college and adult education leaders cite budget and legislative constraints as the reason they are not able to provide comprehensive counseling and advising services to their

respective students. The Middle College program doesn't have permanent funding from the state; nor does Virginia's Career Coach program, which is perceived by education leaders to be spread too thin.

Through its Closing the Gap initiative, begun in 2000, Texas committed to increasing the number of students obtaining degrees and certificates by 50 percent over the next 15 years. The state also set goals for increasing the participation and success of black and Hispanic students. Although Texas has not provided additional funds to achieve these retention and completion goals, the state legislature has required institutions to develop and utilize a "uniform recruitment and retention strategy" to guide their efforts. The plan requires the development of special strategies for serving at-risk students that include key student support services such as advising, tutoring and mentoring. Institutions provide annual reports on how effective their retention strategies have been.

ENROLLMENT IN AND ACCESS TO POST-SECONDARY EDUCATION NEED TO BE INCREASED.

Several programs aim to increase postsecondary access by providing support services such as awareness, mentoring, guidance, tutoring, parental involvement, summer camps, financial aid seminars and other activities for students. But Jane Kusiak, Executive Director of the Council on Virginia's Future, says that in order to recapture adults in the secondary system, there must be "a college-going culture in place" that puts a value on postsecondary opportunities that include college, techni-

cal training and apprenticeships.²⁷ As it is, the transition rate of adult education students into postsecondary education is low, and of those who make the transition, most require remediation.

Although many unanswered questions remain about how the change will affect programs and services, the move of the WIA workforce investment program responsibility from the Virginia Employment Commission into the VCCS is seen as a potential means for helping WIA participants to access the postsecondary system. Currently, the WIA workforce investment system does not emphasize postsecondary enrollment or credit acquisition; as a result, there are few transitions from the workforce system into the community college system.

To address the critical need of providing those without a high school diploma with further education opportunities, the Virginia Adult Learning Panel calls for enhanced collaboration and communication to provide a "more comprehensive continuum of services to adult learners." As noted in *Governor Kaine's Strategic Plan for Workforce Development*: "While the attainment of a high school diploma is still a critical education milestone, it is often insufficient for maintaining success in the 21st century labor market. Skill training beyond high school is critical for success."

In its 2007–13 strategic plan, SCHEV recommends that Virginia "provide information about college earlier, more systematically and more strategically to Virginia's children and their families, especially members of underrepresented populations. Such information should demystify college by detailing higher

education's benefits, outlining preparatory paths and clarifying financial aid."²⁸ To accomplish this, SCHEV recommends creating a working group to identify resources and determine how to market them more effectively. It also recommends that Virginia establish common standards of college readiness using the American Diploma Project and the College Board of Standards for College Success as resources.

There are also several needs-based financial aid programs to assist low-

including full funding for the Partnership Model for need-based programs, which divides the cost of higher education among the student, the state and the federal government. It also calls for increased support for the Tuition Assistance Grants (TAG) program and expansion of the Virginia College Savings Plan (VCSP) to include an income-based incentive program.²⁹

In fact, Virginia received an F for affordability in *Measuring Up 2006: The State Report Card on Higher Education*. Specifically, the report card stated:

cent of the state's college students."³⁰

EDUCATION AND TRAINING NEED TO BECOME MORE RIGOROUS TO MEET THE SKILL DEMANDS FOR 21ST CENTURY CAREERS.

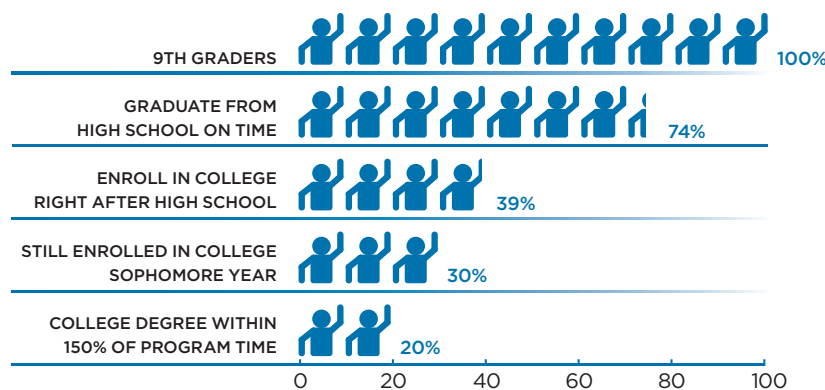
Created to coordinate Virginia's education reform efforts, improve transitions and promote student success, Virginia's P-16 Education Council reported in 2006 that the state's disjointed education system was leaving it woefully prepared to meet the needs of the 21st century.³¹ Among other evidence, it pointed to an education pipeline analysis conducted by the National Center for Higher Education Management Systems (NCHEMS), illustrated in Figure 1. The Council found that all Virginians need education credentials beyond high school: either a college degree (two-year or four-year) or a rigorous workforce certificate.

It also noted a persistent achievement gap with lags in academic performance among minority students, disadvantaged students, students with disabilities and students with limited English proficiency. The gap and projected increases in minority populations highlight the contrast between the highly educated and soon to retire baby boom generation and the state's emerging workforce—increasing the urgency for action.

In its 2008 report, the Virginia Adult Learning Panel reached similar conclusions. Its findings included: some 587,000 adults from ages 18–64 with no high school diploma in 2006; only 32,502 adult learners enrolled in Virginia's adult education and family literacy instructional programs for 2006–2007; and Eng-

FIGURE 1: VIRGINIA'S EDUCATION PIPELINE IN 2002

Out of 100 9th-Grade Students ...



Source: National Center for Higher Education Management Systems.

income students, as well as tuition incentives and guaranteed admissions policies for students transferring from two-year to four-year colleges. However, in its 2007–13 strategic plan, SCHEV concluded that low-income students in Virginia continue to need significantly more financial assistance than they are currently receiving. The strategic plan outlines several action steps to address the financial aid issue,

“Net college costs for students from low- and middle-income families to attend community colleges represent about one-third of their annual family income. (Net college costs equal tuition, room and board after financial aid.) For these students at public four-year colleges and universities, net college costs represent 41 percent of their annual family income. These two sectors enroll 82 per-

lish Speakers of Other Languages account for 50 percent of enrollment in federal and state-funded instructional programs. “Virginia needs ... to be responsive to the higher skill levels required in today’s economy,” the report states. “Virginia has to do a much better job of setting and achieving goals for improving adult learners’ transition into college, certificate programs and apprenticeships.”³²

The importance of a skilled workforce in contributing to economic success is consistently voiced from within the business community, especially among knowledge-driven industries. There are several efforts to build rigorous academic routes in the state, but leaders across the board believe there is much left to be done to prepare students for careers in the key economic sectors of the future. The CTE system’s career clusters framework is considered to be on the right track. It organizes curricula and courses into 16 career fields, within which dozens of curricular pathways teach skills and competencies for specific careers. Other initiatives include Commonwealth Scholars and the Governor’s Career and Technical Academies, each of which encourages students to take more rigorous courses to prepare for high-skill careers. The development of rigorous academic curricula, which has traditionally been a strong point in Virginia, will ensure that this need is met and that the future workforce is prepared to compete with global competition.

¹³ *Quality Counts* <http://www.edweek.org/ew/toc/2008/01/10/index.html>, (Bethesda, MD: *Education Week*, January 2008).

¹⁴ The Commission’s report cites data from the U.S. Census Bureau, 2006 American Community Survey, and the General Educational Development Testing Service, 2006.

¹⁵ Christopher Mazzeo, Brandon Roberts, Christopher Spence, Julie Strawn, *Working Together: Aligning State Systems and*

Policies for Individual and Regional Prosperity (New York, NY: Workforce Strategy Center, 2006).

¹⁶ The Joint Legislative Audit and Review Commission, *Review of Workforce Training in Virginia*, (Richmond, VA, 2002).

¹⁷ *To Ensure America’s Future: Building a National Opportunity System for Adults*, (New York, NY: Council for Advancement of Adult Literacy (CAAL), 2003), p. 85; Patrick Callan, Joni Finney, Michael Kirst, Michael Usdan and Andrea Venezia, *Claiming Common Ground: State Policymaking for Improving College Readiness and Success*, (San Jose, CA: National Center for Public Policy and Higher Education, 2006).

¹⁸ Statistics found in the Kentucky Adult Education Report Card 2005 at www.kyae.ky.gov/NR/rdonlyres/38B5A853-0CFC-4688-919BB86154ECA0EB/0/ReportCard05.pdf.

¹⁹ Email correspondence with central administrative staff for the Wisconsin Technical College System, Division of Teaching and Learning.

²⁰ Kelly S. Mikelson, Caroline Ratcliffe, Demetra Smith Nightingale, *Strategies for Achieving a Skilled, Productive, and Educated Workforce* (Washington, DC: Urban Institute, November 2003).

²¹ Governor Kaine’s Workforce Development Strategic Plan, *Making Connections: Virginia’s New Direction for Workforce Development*, 2006.

²² Mike Brennan, “Innovations for Success: Skills Panels,” (Olympia, WA: Workforce Education and Training Coordinating Board, January 2006).

²³ The Virginia Adult Learning Panel, *Addressing the Education, Skill & Workforce Needs of Adult without a High School Diploma or Equivalent*, September 2008, page 85.

²⁴ Thomas Brock and Lashawn Richburg-Hayes, “Paying for Persistence: Early Results of a Louisiana Scholarship Program for Low-Income Parents Attending Community College,” (New York, NY: MDRC, 2006).

²⁵ Virginia Community College System, *Dateline 2009 Update* (myfuture.vccs.edu).

²⁶ Christopher Mazzeo, Brandon Roberts, Christopher Spence, Julie Strawn, *Working Together: Aligning State Systems and Policies for Individual and Regional Prosperity* (New York, NY: Workforce Strategy Center, 2006).

²⁷ The Virginia Adult Learning Panel, *Addressing the Education, Skill & Workforce Needs of Adult without a High School Diploma or Equivalent*, September 2008.

²⁸ State Council for Higher Education for Virginia, *Advancing Virginia: Access, Alignment, Investment, The 2007–13 Strategic Plan for Higher Education in Virginia*, 2007.

²⁹ *Ibid.*

³⁰ The National Center for Public Policy and Higher Education. 2006. “Virginia,” *Measuring Up 2006: The State Report Card on Higher Education*, 2006.

³¹ Report to the Governor and General Assembly, Virginia’s P-16 Education Council, October 2006.

³² The Virginia Adult Learning Panel, *Addressing the Education, Skill & Workforce Needs of Adult without a High School Diploma or Equivalent*, September 2008.

Establishing a Statewide Career Pathways System

In keeping with the Governor’s vision, Virginia’s career pathways system will be guided by state policy—with an emphasis on regional development. Public systems will need to work collaboratively with business and industry to create a flexible road map of education and training programs tied to career opportunities that allows multiple entry and exit points for students and adults. Armed with the requirements of the labor market, students, workers and unemployed youth and adults need to be able to move seamlessly from one learning institution to another to advance their education and careers.

To create this system, the Task Force has addressed establishing a governance structure and foundation for a statewide career pathways system. The following career pathways system position statement, definition and goals were developed by the Task Force.

POSITION STATEMENT

In today’s world, a business’ skilled workforce is its future success. The state that delivers a skilled workforce delivers success for its economy and its citizens.

CAREER PATHWAYS SYSTEM DEFINITION

A career pathways system is a series of connected education and training programs and support services that enable individuals to secure employment within a specific industry or occupational sector and to advance over time to successively higher levels of education or employment in that sector. Each

step on a career pathway is designed explicitly to prepare for the next level of employment and education.

CAREER PATHWAYS SYSTEM GOALS

A career pathways system delivers success by:

- Providing employers with a connection to a skilled workforce.
- Providing Virginia residents with education and training opportunities to develop and adapt their skills to a changing economy.

A career pathways system in Virginia will:

- Align and connect education and training systems with the business community.
- Inform and advise learners and workers about seamless career and training opportunities in key industries.
- Issue degrees, certificates, diplomas and certifications that are meaningful to employers and portable for individ-

uals to prepare for changing careers.

- Ensure access to postsecondary education by providing all learners with career and educational advising, including assistance with college admissions and financial aid.
- Better utilize articulation agreements that foster smooth transitions to higher levels of education for individuals to progress in education and training.
- Provide experience-based learning, including cooperative learning, internships, service learning or business-based projects, to foster employability skills.
- Encompass all individuals, including K–12 students, postsecondary students, unemployed and underemployed youth and adults, registered apprentices and incumbent workers.
- Provide system flexibility to respond to evolving business needs.

COMMON CHARACTERISTICS OF CAREER PATHWAYS

- Extensive reliance on data from the initial step of selecting target industries and occupations to identifying gaps in education and training for target industries to evaluating the effectiveness of efforts to improve educational attainment and economic advancement in those industries.
- “Road maps” delineating career opportunities and the education and training required for those careers, jointly produced by educators, workforce development professionals and employers.
- Clear linkages between remedial, academic and occupational programs within and among educational institutions.
- Curricula defined in terms of competencies required for jobs and further education at the next level, and, where possible, tied to industry skill standards, certifications or licensing requirements.
- Emphasis on “learning by doing” through class projects, laboratories, simulations and internships at the secondary and postsecondary levels.
- Programs offered at times and places (including workplaces) convenient for working adults and structured in small modules or “chunks,” each leading to a recognized credential.
- The flexibility to enter and exit education as participants’ circumstances permit.
- “Wrap-around” support services, including career assessment and counseling, case management, child care, financial aid and job placement.
- Outreach to middle and high schools to prepare and motivate students.
- “Bridge programs” for educationally disadvantaged youths and adults that teach basic skills, such as communication, math and problem-solving in the context of training for advancement to better jobs and postsecondary education.
- Blending of funds from both public and private sources—such as the Perkins Act, Workforce Investment Act (WIA), Temporary Assistance to Needy Families (TANF), state and federal financial aid and employer tuition reimbursement—and sharing of costs among partners to provide needed education and support services in a cost-effective way.

Source: Career Pathways: Aligning Public Resources to Support Individual and Regional Economic Advancement in the Knowledge Economy, *Workforce Strategy Center*, 2006.

Recommendations and Operational Framework



Based on the information gathered for this report, it is evident that Virginia's statewide approach to career pathways needs to be systemic, responsive to business and labor market needs and characterized by five basic elements: state leadership, reliable and consistent use of data, flexibility, sustainability and visibility. The system must be guided by state policy and coordinated at state agency levels so there is a clear understanding of direction, roles and responsibilities, processes and allowable use of funding.

It has to be based on and must respond to reliable data from regional labor markets; student, unemployment and worker records; and business and industry projections. It must also be constructed in such a way as to allow for the autonomy of regions and institutions, the mobility of students and the rapidly changing landscape of business. And it must, from the beginning, be established with commitments from all who stand to benefit and use the system, a strong infrastructure and accountability at all levels. Each of these features relies on the others, and they all depend on the degree to which they are clearly, consistently and regularly communicated to all parties involved, as well as to the general public.

As noted earlier, Virginia is well-positioned to meet these requirements. The creation of a career pathways system is endorsed by the Governor and heartily supported by state agencies and business and industry leaders. Above all, strong consensus exists among all parties for the need to collaborate and align exist-

ing resources in order to build the system. What is needed is direction, coordination, support and a bold public communications campaign to expand on what already exists and what is known to work.

With the understanding that establishing a statewide career pathways system is an ongoing process, these recommendations are intended to create the foundation for the future career pathways activities of Virginia's career pathways system. As envisioned, the strategies suggested would be primarily the work of the entity coordinating and directing career pathways at the state level. However, that entity may find some of the actions more appropriately handled either collaboratively at the state agency level or by a particular agency or organization.

1.

ESTABLISH STATE LEADERSHIP AND AN OPERATIONAL FRAMEWORK TO SUPPORT REGIONAL ACTION.

While the primary work of a career pathways system takes place at the regional level, state agencies play a critical role in the realm of policy, guidance, communications and accountability to enable regional programs to grow and thrive. The Task Force has defined and set goals for the career pathways system in Virginia. The next step is to identify a group or entity to lead the implementation effort across the state. This entity, whether new or adapted, should be responsible for recommending policy; setting guidelines; providing centralized planning, technical assistance and communications; and laying out the defined roles and responsibilities of each career pathways system partner. It must have: 1) authority and the ability to influence decisions; 2) membership that reflects all levels of education, workforce development, economic development and the employer community; 3) staffing to support its efforts; and 4) a mandate to serve in the capacity to coordinate the career pathways system for the Commonwealth of Virginia. It must also be

able to transcend changes of administration. A statewide career pathways system requires not only an explicit governance structure, but also a clear understanding that regional career pathways activity must be coordinated and undertaken by state agencies working in collaboration with one another to ensure accountability and avoid duplication of effort. These activities will allow agencies to provide both appropriate support for regional and local initiatives and a ready means of capitalizing on promising career pathways programs and initiatives currently under way.

The entity governing the career pathways system should be responsible for the following cross-agency activities:

- Developing a process for asset alignment among state and regional priorities and among education, workforce and economic development partners to support regional career pathways that meet business and worker needs.
- Planning and continuous improvement activities to determine whether goals and objectives are being met.
- Devising policy recommendations and/or revisions to support and promote regional career pathways.
- Ensuring that processes to monitor instructional effectiveness and relevancy are implemented.
- Facilitating a means of communications at the state, regional and local levels to ensure the Virginia career pathways system is sustained.

Action: Charge the Virginia Workforce Council (Council) with responsibility for leading the state's career pathways system initiative.

- Modify Council membership to include members or approved members from VDOE, SCHEV and VEDP.
- Create a Career Pathways Sub Council (Sub Council) made up of the Task Force members to advise the Council.
- Define the roles and responsibilities of the Council as well as a process that clearly stipulates how action is taken and by whom.
- Staff the Council's career pathways efforts (possibly creating a career civil servant position called state career pathways system director).
- Build Virginia's career pathways system strategy into the Commonwealth's economic development strategy.
- Report on activities to the Workforce Sub Cabinet and the P-16 Council on a regular basis.
- Determine roles and responsibilities of relevant Virginia agencies (according to the Career Pathways Roles and Responsibilities matrix on page 22).
- Develop a career pathways system marketing campaign.

Action: Set clear guidelines for implementation by creating an operational plan for a state and regional career pathways system that:

- Sets forth a guiding vision.
- Incorporates employer demand and state economic development priorities into career pathways planning.
- Engages and supports regional actors.
- Provides financial support for planning and piloting regional career pathways systems, possibly through a Request for Proposals process.
- Breaks down silos within and between state agencies.

- Establishes a communications vehicle for promoting career pathways systems and fostering its adoption at the regional level.
- Reallocates funding to support career pathways.
- Establishes a performance measurement system based on continuous improvement.

Action: Identify opportunities for the alignment of resources to support the career pathways system at the state level.

- Determine what state-level services are critical to support student, out-of school youth, unemployed and working adult success in workforce education. Create a resource map of programs and services that currently exist.
- Establish a pool of resources to promote alignment at the regional level. Draw on the discretionary resources provided by Sub Council member agencies.

2.

ESTABLISH A MEANS TO ENCOURAGE AND FACILITATE THE USE OF DATA TO STRENGTHEN CONNECTIONS TO BUSINESS, INFORM PROGRAM DEVELOPMENT AND MEASURE SUCCESS.

The process of building career pathways is heavily reliant on data, from the initial step of selecting and targeting industries and occupations to recruiting and retaining participants in pathways programs to evaluating the effectiveness of pathways in promoting participant career advancement and meeting the

CAREER PATHWAYS ROLES AND RESPONSIBILITIES

RESPONSIBLE ORGANIZATION	ROLES	PROGRAMS
Virginia Community College System	1. Provide postsecondary degrees and certificates leading to career track employment	2yr/4yr transfer policies Apprenticeship-related instruction
	2. Provide occupational training	Career Coaches
	3. Provide information and guidance to students regarding academic and career opportunities	Career Readiness Certificate Dual Enrollment/Tech Prep
	4. Improve the academic skills of under-prepared students	Guaranteed Admission
	5. Provide workforce development programs and services to workers and businesses	Middle College Occupational instruction programs
	6. Promote postsecondary access and success for students	Tech Prep
		WIA services
Virginia Economic Development Partnership	1. Convene stakeholders	
	2. Provide information and data regarding industries and occupations in Virginia	
	3. Align workforce strategies with economic development strategies and incentives	
Virginia Department of Business Assistance	1. Provide workforce development services to businesses in Virginia	Virginia Jobs investment program Worker Retraining Tax Credit
Virginia Department of Education (Career and Technical Education)	1. Prepare students for postsecondary education and careers	Academic and Career Plans/Career
	2. Provide rigorous curricula	Pathways Plans of Study
	3. Provide information and guidance to students regarding academic and career opportunities	Career Clusters/Career Pathways and Industry Credentialing
	4. Enable smooth transitions into postsecondary programs	Commonwealth Scholars, High Schools That Work and Governor's Career and Technical Academies
		International Baccalaureate Courses/ Validated Credits
Virginia Department of Education (Adult Education and Literacy)	1. Prepare students with basic skills needed to access postsecondary or occupational training	Basic skills programs Bridge programs
	2. Provide information and guidance to students regarding academic and career opportunities	English language programs
Virginia Department of Labor and Industry	1. Provide information and data regarding industries and occupations in Virginia	Apprenticeship programs
	2. Provide workforce development services	
	3. Provide apprenticeship programs	
Virginia Employment Commission	1. Convene stakeholders	Trade Adjustment Assistance
	2. Provide workforce development programs and services to workers and businesses	
State Council for Higher Education in Virginia	1. Provide oversight for postsecondary programs	2yr/4yr transfer policies
	2. Promote postsecondary access and success for students	Guaranteed Admission
	3. Advance educational affordability and financial aid programs	Scholarship and financial aid programs
	4. Provide postsecondary degrees and certificates leading to career track employment	
Virginia Department of Social Services	1. Promote postsecondary and career access for low-income and	Food Stamp Employment and Training
	2. low-skill workers	TANF-related training

workforce needs of employers.³³ To function in a truly demand-driven manner, Virginia needs easily accessible, reliable and current data. To encourage uniform usage and data analysis, the Commonwealth also needs materials that explain how education and workforce practitioners can access and use LMI to inform the development of curriculum and training programs and services at the regional level. The pockets of data that currently exist also need to be coordinated and centrally located to encourage and facilitate data collection and sharing.

Action: Create an LMI advisory group to keep the Council, Sub Council and state agencies apprised of current LMI data trends, research and analysis and how these might affect and be used to inform both policy and practice.

- Hold quarterly meetings with the LMI advisory group, including state and regional LMI experts, education and training providers, economic development representatives and business/industry leaders.
- Create a directory of labor market reports and resources that can be easily accessed by regional practitioners for the purpose of program development and continuous improvement. Make the directory part of a broader, comprehensive career pathways system communications effort.

Action: Explore options for tracking career pathways system progress and success.

- Initiate discussions with national educational and workforce researchers to examine how other states are track-

ing career pathways systems.

- Utilize the outcomes of the discussions to develop and implement career pathways performance measures and state-level outcomes.

3.

ESTABLISH THE MEANS TO ENCOURAGE TRANSITIONS AMONG EDUCATION AND EMPLOYMENT SYSTEMS, PROGRAMS AND SERVICES. TRANSITIONS SHOULD ALLOW FOR FLEXIBILITY AT THE REGIONAL AND/OR INSTITUTIONAL LEVEL.

Virginians looking to advance their educational and career goals must be able to move seamlessly across different levels of education and into the workforce. A well-aligned system allows for the seamless transition from one part to another, encouraging lifelong learning. The Commonwealth is characterized by all of the necessary components—career clusters, dual enrollment, articulation across educational systems. However, these elements are not implemented uniformly. What's more, the Commonwealth lacks an existing system that allows for seamless transitions from one educational system to the next. The Commonwealth should encourage uniformity so credentials are portable from one region to the next and individuals from every region have access to educational opportunities leading to careers.

Action: Set a policy goal for improving student transitions at all levels and develop indicators of success for meeting this goal.

- Form a task force on articulation to

determine where articulation agreements are needed, where they exist and where they are successful.

- Use the findings of the task force to inform policy recommendations to improve student transitions through articulation agreements.
- Include indicators of success and guidelines for measuring progress against the indicators.
- Create a culture of lifelong learning through consistent communications.

Action: Set guidelines for strengthening transitions for adult learners.

- Develop learning plan templates for adult students pursuing training.
- Create articulation agreements to facilitate the transitions of adults to postsecondary education.

Action: Establish guidelines to enable the one-stop system to serve as an integral component of the career pathways system.

- Ensure that integration of the career pathways system becomes part of the implementation of Executive Order 61.

Action: Strengthen the role registered apprenticeship and lifelong learning can play in advancing transitions.

- Align registered apprenticeship with the Career and Technical Education system to ensure students have the proper orientation and preparation.
- Align the registered apprenticeship program with the one-stop system to ensure unemployed and underemployed adults have the opportunity to transition to apprenticeship opportunities.

4.

ESTABLISH THE MEANS FOR EXPANDING THE PROVISION OF SUPPORTIVE SERVICES—including advising and coaching—to increase retention and completion rates among Virginians enrolled in workforce training and education programs.

Educators in Virginia agree that the provision of counseling and career coaching is critical to helping students (traditional as well as adult) prepare for careers. While pockets of these services exist, they are not widespread. The provision of such services could greatly improve completion rates among Virginia residents. These include academic services, which help individuals successfully navigate academic challenges as they develop; personal guidance services, which help individuals address personal issues that may impinge on their academic performance; and supplemental supports and services, which provide individuals with access to resources that can help alleviate other family and personal needs such as work study, child care and transportation.

Action: Set a policy goal for improving access to coaching and advising services to help improve program retention and completion rates and set indicators of success for meeting the goal.

- Hire an independent evaluator to conduct a study of the benefits and services—such as need-based financial aid (for traditional students, working adults and those in occupational programs), flexible program

delivery, college and career success courses, learning communities and proactive advising—that contribute the most to student success in workforce education.

- Use the findings of the study to inform policy on improving access to coaching and advising. Policies should establish indicators of success and guidelines for measuring progress against the indicators.

5.

ESTABLISH SUSTAINABILITY OF VIRGINIA'S CAREER PATHWAYS SYSTEM AS A CROSS-AGENCY AND BUSINESS PRIORITY ACROSS ALL RELEVANT AGENCIES AND KEY INDUSTRIES.

Virginia struggles to sustain workforce initiatives beyond the single term limit of any gubernatorial administration. In addition to the personnel turnover and changing agendas that follow each administration change, there is a lack of capacity to sustain policy initiatives among key workforce institutions. Almost all education and workforce leaders agree that for the career pathways system to become a permanent fixture in Virginia, the Commonwealth will need to confront these sizable roadblocks.

Action: Task the Sub Council with the responsibility to explore how each of the member agencies and businesses can support and sustain the career pathways system into the future.

- Update the Council's Funding Summary 2005 to reflect current programs and funding.

- Gain commitment to sustainability of the career pathways system from key business leaders.
- Announce commitments to the public as part of the communications campaign.

Action: The Council should build on Sub Council findings and develop a sustainability plan that identifies roles for each of the Sub-Council agencies within one year of adopting the career pathways system responsibility.

- Include in the sustainability plan a business model for how core elements of the career pathways system can be funded within ongoing, permanent funding streams of existing Commonwealth institutions.
- The plan should identify what policy changes, if any, are needed to allow ongoing funding.
- The plan should be completed and communicated to the public within one year of the Council's adoption of career pathways responsibility.

³³ Davis Jenkins, "Using Data to Design, Manage and Improve Career Pathways," (New York, NY: Workforce Strategy Center, 2006).

Action Plan

ACTION PLAN

RECOMMENDATION	ACTION	PARTIES INVOLVED	TIMEFRAME FOR COMPLETION
1. Establish state leadership and an operational framework to support regional action.	Charge the Virginia Workforce Council with responsibility for leading the state's career pathways system initiative.	Governor VCCS VDOE Sec of Education	October 2008 Workforce Council Meeting
	Set clear guidelines for implementation by creating an operational plan for the state career pathways system.	Sub Council	June 2009
	Identify opportunities for alignment of resources to support the career pathways system at the state level.	Sub Council	June 2009
2. Establish a means to encourage and facilitate the use of data in order to strengthen connections to business, inform program development and measure success.	Create an LMI advisory group to keep the Council, Sub Council and state agencies apprised of current LMI data trends, research and analysis and how these might affect and be used to inform both policy and practice.	Sub Council VEDP Virginia Department of Business Assistance Virginia Employment Commission Weldon Cooper Center Chmura Economics and Analytics	June 2009
	Explore options for tracking career pathways system progress and success.	Sub Council	September 2009
3. Establish the means to encourage transitions among education and employment systems, programs and services. Transitions should allow for flexibility at the regional and/or institutional level.	Set a policy goal for improving student transitions at all levels and develop indicators of success for meeting this goal.	Sub Council	September 2009
	Create guidelines for strengthening transitions for adult learners.	Sub Council	November 2009
	Establish guidelines to enable the one-stop system to serve as a central component of the career pathways system.	Sub Council	November 2009
	Strengthen the role registered apprenticeship and lifelong learning can play in advancing transitions.	Sub Council	November 2009
4. Establish the means for expanding the provision of supportive services, including advising and coaching, to increase retention and completion rates among Virginians enrolled in workforce training and education programs.	Set a policy goal for improving access to counseling and advising services to help improve program retention and completion rates. Establish indicators of success for meeting the goal.	Sub Council	February 2010
5. Establish sustainability of Virginia's career pathways system as a cross-agency and business priority across all relevant agencies and key industries.	Task the Sub Council with the responsibility to explore how each of the member agencies and businesses can support and sustain the career pathways system into the future.	Workforce Council	May 2010
	The Council should build on the Sub Council findings and develop a sustainability plan that identifies roles for each of the Sub Council agencies within one year of adopting the career pathways system responsibility.	Workforce Council	July 2010